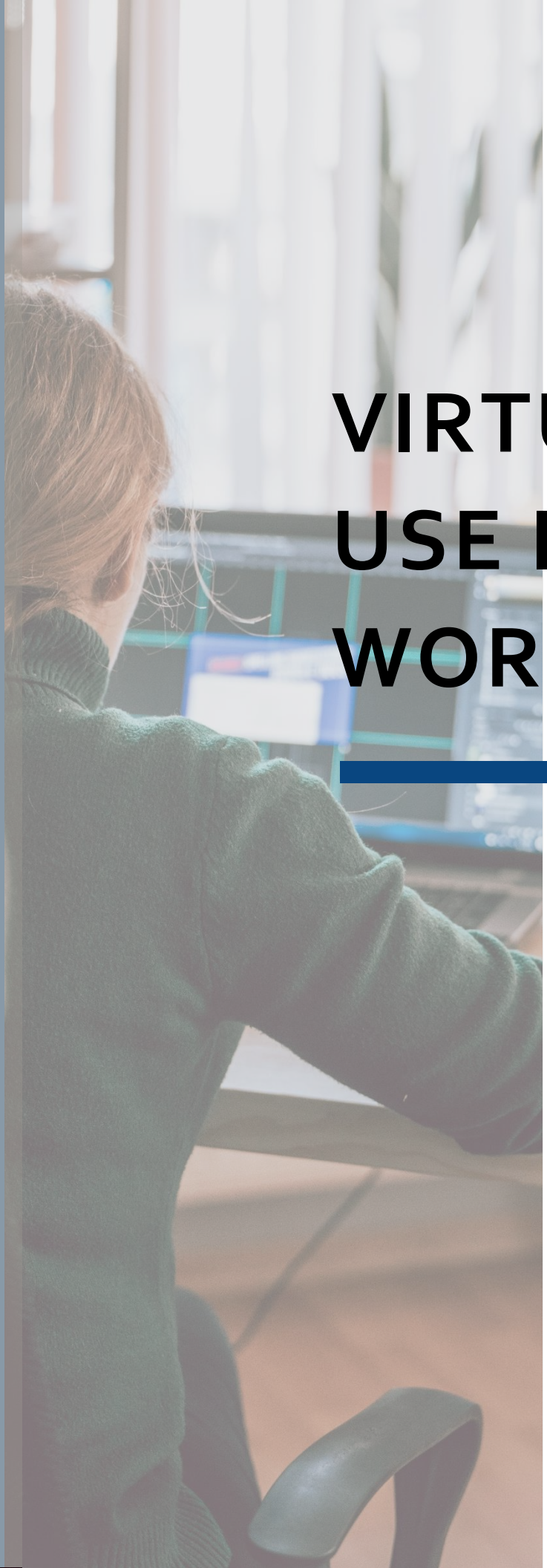

INTEGRATED BENEFITS INSTITUTE

VIRTUAL CARE USE IN THE WORKPLACE

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EXECUTIVE SUMMARY

The use of technology to provide healthcare, known as virtual care, was not widely used until the COVID-19 pandemic brought on restrictions that discouraged people from in-person treatment. While there are concerns about who is receiving virtual care and the quality of care being provided, virtual care has been a valuable option to provide care, saving time and maintaining productivity among the workforce. Several options exist when selecting virtual care for benefits plans – from national vendor providers to traditional healthcare providers. This study was designed to use both national and claims data in 2020 and 2021 to describe which employees use virtual care, from their missed workdays and health conditions to demographics including location. Employers provided guidance on their own benefits surrounding virtual care and strategies they have put in place before and during the pandemic.

The 2020 national data was collected from the National Health Interview Survey from July to December. Here, we focused on virtual visits among the 4 in 5 employees who already visited a doctor in the past year. A third of these employees who visited a doctor used virtual care, which stayed consistent month to month. Important findings include:

- Virtual care was higher among employees who utilized urgent care or the emergency room (ER).
- Virtual care increased with the number of missed workdays due to illness, injury, or disability.
- Employees with anxiety or depression used virtual care the most, especially when missing days from work.
- Virtual care was used most by employees in the northeast and west – the highest use was seen in urban areas and lowest in rural areas throughout the nation.
- Employees who are males, 18-24 years, with high school education or less, Black, and/or $0-$35K annual family income, use virtual visits less.

The 2021 Household Pulse Survey data from April to October determined that 1 in 5 employed adults (and their children) used virtual care in the past 4 weeks with a significant decrease in use seen after the Fourth of July holidays. Video use was significantly more popular than using the phone. Other highlights include:

- While the private sector has the most employees, these employees use virtual care less than other sectors.
- Among frontline workers, healthcare workers used virtual care the most; food and beverage retail workers the least.
- Employees who had been diagnosed with COVID-19 or had received at least one dose of COVID-19 vaccine used virtual care more.
- Employees living in northeast and west regions use virtual care more.
- Employees who use virtual care less reported as male, 18-24 years old, and/or having a high school education.

UnitedHealthcare (UHC) claims data observed the medical care virtual visits from national vendor providers and traditional providers from over 6 million members. Claims incurred from September 2020 through the end of August 2021 (payouts through September 2021) show that the overall number of virtual claims has decreased since the beginning of the pandemic but have remained steady throughout. Approximately 1 in 4 subscribers (employers) used traditional and/or national virtual vendor providers for virtual visits. Highlights include:

- National virtual vendor providers accounted for only 8% of virtual visits among members and are used for more acute care including sinus infections or UTIs. COVID-19 was ranked 24th in diagnoses.
- Members that use national virtual vendor providers have high engagement and utilization of care including ER and urgent care visits.
    - The average paid per ER visit is lower for members that had a virtual visit with a national provider which indicates lower severity.
- National virtual providers are used more with lower income subscribers compared to in-person visits. Compared to other race and ethnicities, Hispanic subscribers use national virtual providers the most. Rural subscribers accessed virtual care less than urban subscribers.
- Risk score, which indicates disease burden, was more than twice as high for those using traditional providers for virtual care compared to national virtual vendor providers. This indicates that subscribers are using virtual visits with traditional providers to manage chronic conditions.
- Members that accessed virtual care with a traditional provider had the highest ER utilization. The high disease burden and higher average allowed amount per visit indicates the higher

Several themes arose when summarizing guidance provided by the health and benefits professionals of several large employers:

- Large employers integrated **national virtual vendor providers** into their benefits plans well before the pandemic for convenience and cost savings and to provide the 'new shiny' object. They now see the value and need for access, especially as utilization skyrocketed during the pandemic.
- **Data to support healthcare programs** like virtual care is more important now than ever, and employers are going beyond costs and utilization to look at outcomes and even quality of provider care.
- **Make communications focused, concise, and intentional** – employers got creative (e.g., refrigerator magnets, postcards with QR codes) to send employees and their families information regarding virtual care options.
- **Expand virtual care to meet the need of all pillars of wellbeing** – physical, emotional, financial, and social – and work towards a medical home model for virtual care to create more holistic whole person health solutions and meet individuals where they are in their healthcare journeys.

Contents

BACKGROUND

Virtual care is the use of technology to communicate with patients via phone, video, instant messaging, and other platforms to deliver healthcare. Prior to the pandemic, virtual care claims were quite low - only 0.38% of claims were billed as virtual in February 2020.[1] As COVID-19 pandemic restrictions took hold in the US in March 2020, many patients were discouraged from seeking healthcare in-person, resulting in a vast increase in virtual appointments. In fact, records of over 31 billion medical and dental claims showed more than a 4,000% increase in virtual claims from March 2019 (0.17%) to March 2020 (7.52%).[2]

Due to this marked increase, this project developed out of the concern that virtual care is not closing the gap in replacing the decrease of in-person visits due to the COVID-19 pandemic.[3] Adults are likely not being treated for conditions that may warrant virtual care, and there may be people missing out on receiving adequate healthcare. Additionally, employers are concerned that their employees are not receiving the care they need to maintain their health. This study examines which employees are using virtual care throughout the pandemic, and the results can help shape benefits decisions and encourage employees to seek care through different avenues.

Although the quality of virtual care to treat all conditions is not currently known, there are important benefits of virtual care for employees. Employees have been able to seek care and treatment when unable to in-person and can use virtual care to save time, which in turn maintains productivity. For employers designing benefits plans, there are many virtual options to choose from, including national care providers' virtual platforms, as well as doctors and traditional healthcare providers launching their own virtual care. This study aims to help employers answer if virtual care would be useful for their employee population by providing data and guidance on how employers have made their own benefits decisions regarding virtual care. We are incorporating national and claims data to answer the following research questions about employee populations:

- Using national data, how many employees are using virtual appointment in 2020 and 2021?
    - Are there differences in virtual care use by demographics? Health conditions?
- Using claims data, what providers are subscribers using most for virtual appointments?
    - Are there differences in total care use by subscribers who use virtual appointments? Demographics? Subscriber profile?

[1] FAIR Health. Monthly Telehealth Regional Tracker, Feb. 2020. Link
[2] FAIR Health. Monthly Telehealth Regional Tracker, Mar. 2020. Link
[3] Patel SY et al. Trends in Outpatient Care Delivery and Telemedicine During the COVID-19 Pandemic in the US. JAMA Intern Med. Nov 2020. doi:10.1001/jamainternmed.2020.5928

DATA SOURCES

Two nationally-representative surveys were used to examine virtual care use by employees in 2020 and 2021. Additionally, claims from UnitedHealthcare were analyzed to support survey data.

National Health Interview Survey 2020

The National Center for Health Statistics implements the annual National Health Interview Survey (NHIS) to collect data on health conditions among the US population.[4] From July to December 2020, a question was added on virtual care asking if adults "had an appointment with a doctor, nurse, or other health professional by video or by phone" in the past 12 months. This sample included 8,521 adults between 18-64 years old who worked in the last week. The final sample was then limited to those who had sought care from a doctor or health professional in the past year (n=6,760).

Household Pulse Survey 2021

Data for 2021 were analyzed from the US Census Bureau's Household Pulse Survey (HPS), a survey that collects information on how households were financially impacted by the COVID-19 pandemic.[5] Questions specific to virtual care were added in Phases 3.1 (April 14 through July 5) and 3.2 (July 21 through October 11) of data collection and asked participants if "you have an appointment with a doctor, nurse, or other health professional by video or by phone" in the last four weeks and if their children had a virtual appointment as well. Among adults aged 18-64 years old, 354,159 were employed in the past seven days.

Both national data sets used survey weights to adjust for nonresponse and represent the US population. Differences in telehealth use by variables were examined using Pearson's Chi Square test and not adjusted for any other variables.

UnitedHealthcare Claims

The UnitedHealthcare (UHC) claims data was obtained from 6.3 million members (employees and their spouses and dependents) from the National Accounts Book of Business. Virtual visits were for medical care and not behavioral care unless noted with a focus on national virtual vendor providers over traditional providers (healthcare practices that added a virtual platform). National vendor providers include three contracted main platforms (Amwell, Doctors on Demand, and Teladoc) and non-contracted smaller local companies. Additional data compares subscribers (3.3 million employees) with no virtual visits and those who have used traditional providers and/or national providers for virtual visits. Overall claims data were provided from January 2020 through August 2021 with payouts through September 30, 2021. Details on national and traditional provider were analyzed from claims incurred from September 2020 through the end of August 2021 with payouts through September 2021.

[4] National Center for Health Statistics. National Health Interview Survey. 2020 NHIS. Link

[5] United States Census Bureau. Household Pulse Survey: Measuring Social and Economic Impacts during the Coronavirus Pandemic. Link

RESULTS: 2020

More than one in four (28.3%) of all employees had a virtual appointment in the past year, where the majority had used virtual care for COVID-19 in at least one appointment (85.0%). There was no difference in virtual care appointments from month to month between July and December. However, there was an increase from July to December in COVID-19 testing.

Nearly four in five employed adults had sought care from a doctor or health professional in the past year (Figure 1). July (81.2%) was higher than October (74.7%) for seeking care, yet there were no other differences when comparing months. The majority of these employees last saw a doctor for a wellness or physical visit (79.6%). Among employees who sought care, 34.2% had a virtual appointment in the past year. There were no statistically significant differences in the percentage of employees who used virtual care month to month.

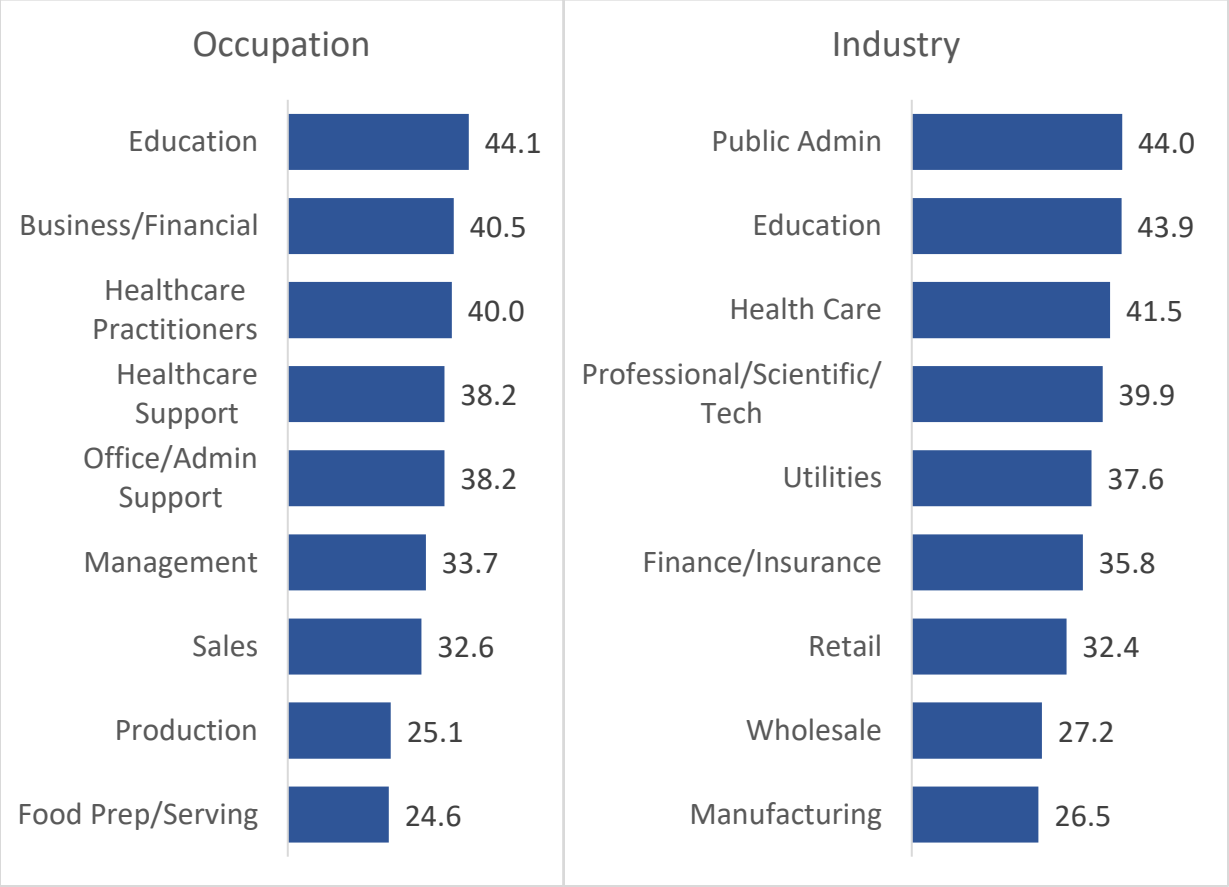
Figure 1. Employees Who Sought Care in Past Year by Month, 2020

	TOTAL	Jul	Aug	Sep	Oct	Nov	Dec
Saw a doctor within the past year	77.5%	81.2%	78.6%	77.6%	74.7%	75.6%	77.8%
Virtual appointment within the past year	34.2%	30.5%	33.3%	32.8%	34.9%	35.8%	38.0%

Work Variables

Several relevant work variables in the NHIS data – work status, employer offering paid sick leave or health insurance, industry, and occupation – showed differences in virtual care use. Employees who work part-time are more likely to use virtual care. Employees who work for employers who offer paid sick leave or health insurance also use virtual care more. Health care and social assistance (10.8%) and education (9.8%) are the top industries, and public administration and education use virtual care the most (44% and 43.9%, respectively; Figure 2). Management (11.2%) and office and administrative support (10.3%) were the most popular occupations, yet education and business and financial occupations used virtual care the most (44.1% and 40.5%, respectively).

Figure 2. Weighted percentage of employees who had a virtual appointment when care sought in past year by industry and occupation



Virtual Care Differs Among Healthcare Utilization, Days of Missed Work, Disability, and Health Conditions

Among those that delayed medical care in the past 12 months (24.9%), 49% had a virtual appointment when care was sought from a doctor in the past year compared to 29.4% who had not delayed care. This result indicates that after initially delaying care, employees may be using virtual care before seeking care in-person. Nearly one in three had visited urgent care in the past 12 months at least one time, and 17.8% visited the ER in the past 12 months at least one time. Virtual care did not significantly differ from average among employees who went to urgent care either none, one, or two times, yet virtual care was significantly higher when visiting urgent care three or more times (52.2%). Employees who visited the ER had increased virtual care use at one visit (43.5%) and two visits (42.6%) compared to no visits (32.3%).

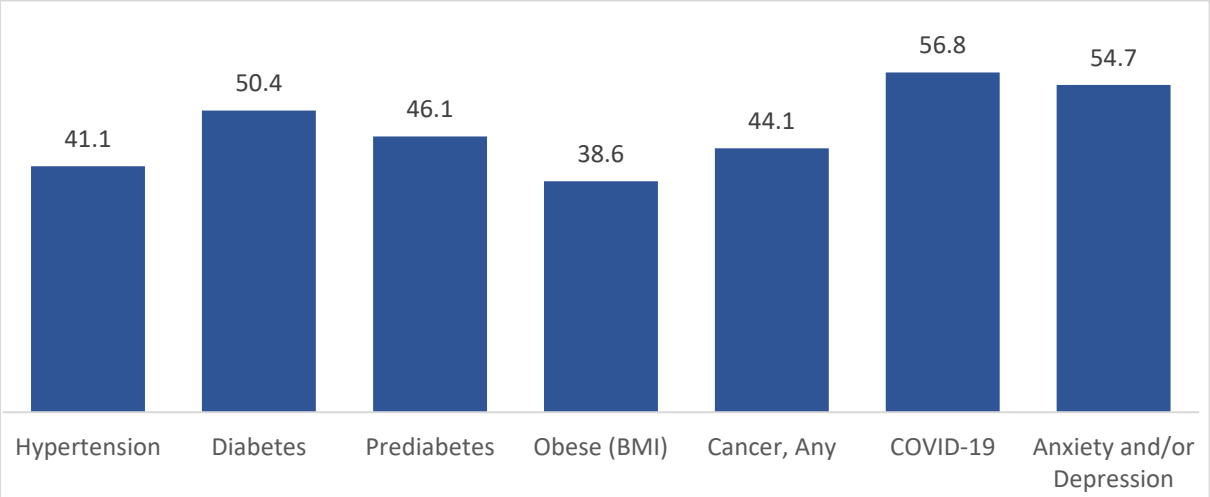
NHIS included one measure of absenteesim – days of work missed in past 12 months due to illness, injury, or disability. Among employees who sought care in the past year, 41.3% had missed at least one day of work. Employees who missed no days used virtual care less than average (28.8%), while missing 3-10 days or 11 or more days increased virtual care use (42.6% and 50.9%, respectively).

Employees with work restrictions due to health problems were more likely to use virtual care (43.4%) than those without work restrictions (33.3%). Virtual care was higher among employees with work restrictions when they missed work no days or 11 or more days than those without work restrictions.

There were no differences in virtual care when 1-2 or 3-10 days were missing. Virtual care use was also higher among employees with self-reported impairment (54%) versus those without impairment (33.6%). Among missed work days, employees with impairment had higher virtual care use when missing no or 11 or more workdays. No differences were observed for 1-2 or 3-10 days of missed work.

Among common chronic health conditions, obesity (34.2%), hypertension (23.6%), and anxiety and/or depression (21.4%) were the most diagnosed among employees. Additonally, COVID-19 was diagnosed among 5.8% of employees. Virtual care use was highest among employees diagnosed with COVID-19 (56.8%) and anxiety and/or depression (54.7%) and lowest among obesity (38.6%; Figure 3). Obesity is likely low as it is often billed as a cormorbid condition. The data also indicate that these employees used virtual care but not the diagnoses from their virtual appointments. Virtual care use and days of missed work greatly differed by health condition. For example, employees with diabetes (when compared to those without diabetes) used virtual care more amongst those who did not miss any work, which could indicate that the use of virtual care may reduce absenteeism. However, employees with anxiety and/or depression used virtual care more no matter how much work was missed, as access to virtual care for behavioral health would be expected to be higher.

Figure 3. Percentage of virtual care use by health conditions



Differences in Demographics

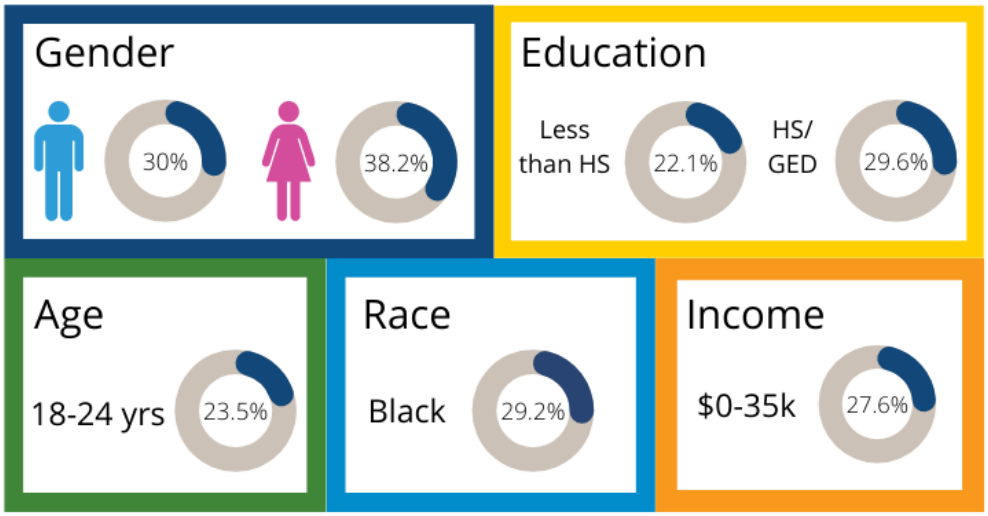
Virtual care was highest in the West (39.8%) and Northeast (39.1%), even though more than a third of the study population reported living in the South (36%). Virtual care also trended downward by county population size, with highest use in large metro areas and lowest in rural areas.[6] This downward trend was found in all regions except the northeast, which may be due to closer proximity (Figure 4).

Figure 4. Weighted percentage of employees who had virtual appointment when care sought in past year by location

	TOTAL	Northeast	Midwest	South	West
TOTAL	34.2%	39.1%	30.6%	30.5%	39.8%
Large Metro	40.2%	42.1%	40.3%	36.0%	42.8%
Large Suburban	34.7%	40.7%	29.0%	30.9%	44.4%
Medium Metro	31.6%	34.8%	32.9%	27.5%	35.1%
Rural	24.5%	31.3%	17.6%	25.8%	32.9%

Employees who are male, 18-24 years old, earned a high school degree/GED or less, Black, earning $0-$35K within the household annually, heterosexual, never married, not insured, and reporting excellent health use virtual care significantly less than their counterparts (Figure 5). There was no statistically significant difference in virtual care use by number of children. Analytical findings are detailed in the Appendix Table 1.

Figure 5. Differences in Virtual Care by Employee Sociodemographics



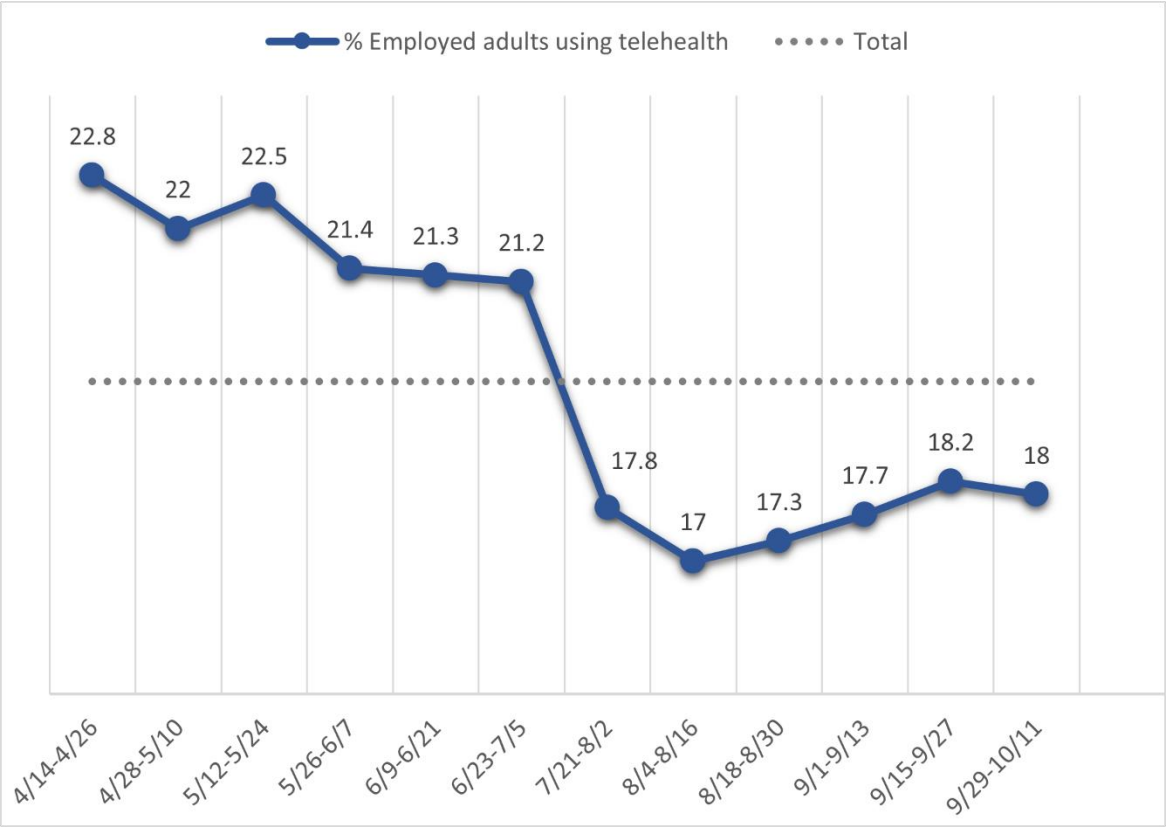
[6] County population sizes are defined by the CDC in Table 2 here. Large suburban represents large fringe metro counties. Medium metro includes small metro counties as well. Rural includes all nonmetropolitan counties.

RESULTS: 2021

From April 14 through October 11, one in five employees used virtual care in the past four weeks. There is a statistically significant decrease in virtual care after the Fourth of July holiday (June 23 through July 5; Figure 6). Additionally, video use was significantly more popular than phone use to receive virtual care.

Employees with children were also asked about their children's virtual care use. Similar to employees, one in five children of employees also used virtual care. Video use was also more popular. While virtual care use also statistically significantly decreased for children after the Fourth of July holiday, the number of children skipping preventive care appointments in the past year increased.

Figure 6. Employees Who Use Virtual Care by Data Collection Weeks

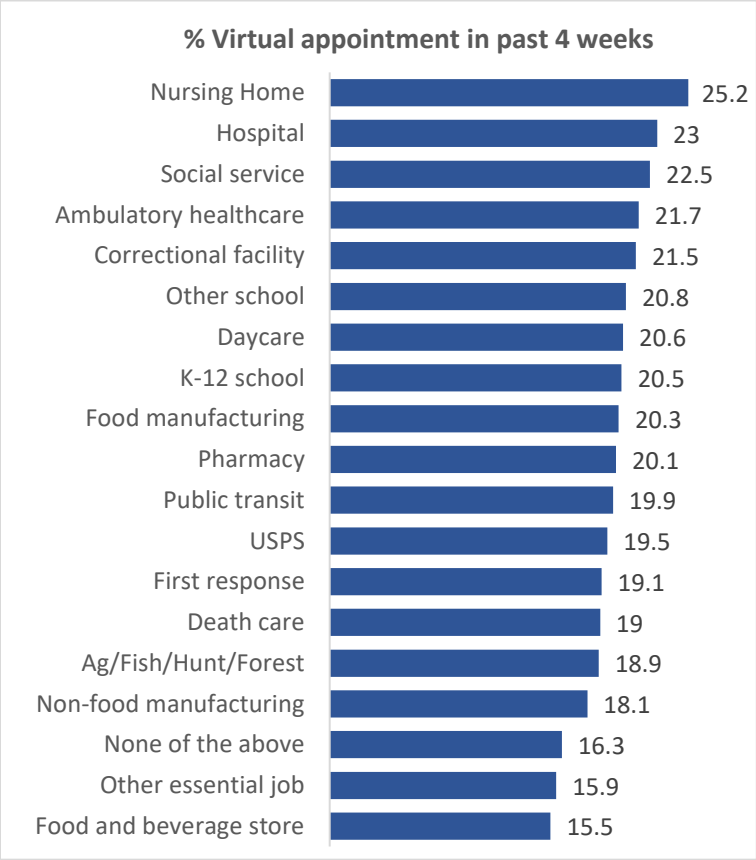


Work Variables

Forty-five percent of employees had teleworked in the household within the past seven days. Employees with telework used virtual care more than those without telework (22.3% vs 17.6%). Most employees worked within the private sector (62.4%). However, private sector employees used virtual care less than other sectors (18.4%), while government and non-profit sectors used virtual care more (23.6% and 22.6%, respectively). The most popular job settings outside of the home were non-food manufacturing

(16.9%), non-essential (categorized as none of the above; 13.1%), and hospital (12.0%). Healthcare services were among the most popular users of virtual care – nursing home (25.2%), hospital (23.0%), social services (22.5%), and ambulatory healthcare (21.7%; Figure 7). The settings that used virtual care the least included other essential (15.9%), and food and beverage retail (e.g., grocery stores; 15.5%), which were statistcally significantly less than average (19.7%).

Figure 7. Job Settings for Employees Working Outside of the Home



Virtual Care Differs Among COVID-19, Disability, and Healthcare Utilization

The number of employees told that they had COVID-19 by a doctor or healthcare professional was 16.2%. Similar to NHIS data, those who had COVID-19 used virtual care more than those who were not told they had COVID-19 (21.8% vs 19.3%). Four in five employees had received at least one dose of the COVID-19 vaccine. Employees with the vaccine also used virtual care more than those without the vaccine (41.3% vs 19.7%).

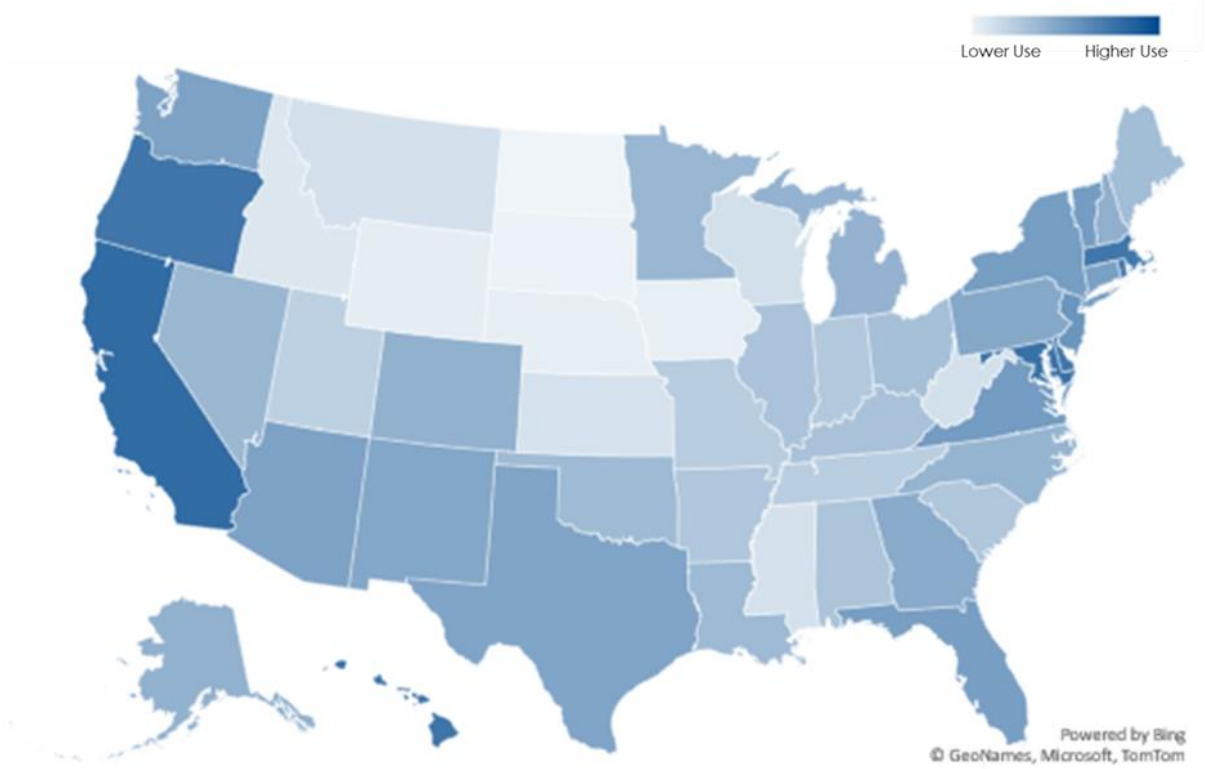
While the number of employees on medicare coverage for disability was 3.7%, these employees use virtual care more (29.7%) than employees without medicare disability coverage (19.3%). Nearly one in 10 employees reported a lot of impairement, or difficulty with seeing, hearing, remembering, or mobility. Another 43% of employees reported some impairment. Employees with reported impairmment see a significant increase in virtual care use from no impairment (15.4%) to some (21.8%) to a lot (31.1%).

Among the 17.7% of employees who delayed care in the past four weeks, 37% used virtual care compared to 18.6% of employees who did not delay care. More than half (53.3%) of employees had an in-person medical or dental appointment in the past seven days. Employees seeking care in-person were also more likely to use virtual care than those who did not seek care in-person (21.8% vs. 13%).

Differences in Demographics

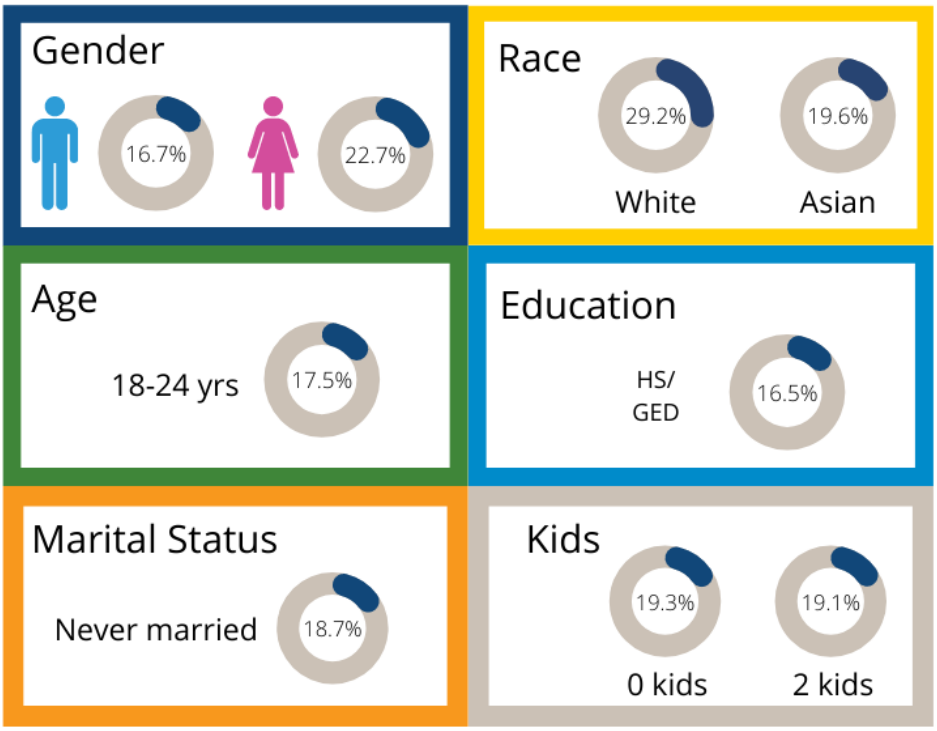
Similar to NHIS 2020 findings, virtual care was highest in the West (22.3%) and Northeast (21.0%). Data on virtual care use by state supports these findings. Figure X shows the percent difference in state virtual care use compared to the national average (19.7%) indicating higher use in states in the West and Northeast (Figure 8).

Figure 8. Percent Difference in Virtual Care use of States by National Average



Employees with some/very much difficulty with expenses use virtual care more than those with no/little difficulty (24.9% vs. 18.1%). Having health insurance coverage increased virtual care use among employees compared to those without health insurance (20.7% vs. 8.3%). Employees who are male, 18-24 years old, earned a high school or GED education, never married, identified as white or Asian, and have no or two children used virtual care statistically significnatly less than their counterparts (Figure 9). Analytic details can be found in Appendix Table 2.

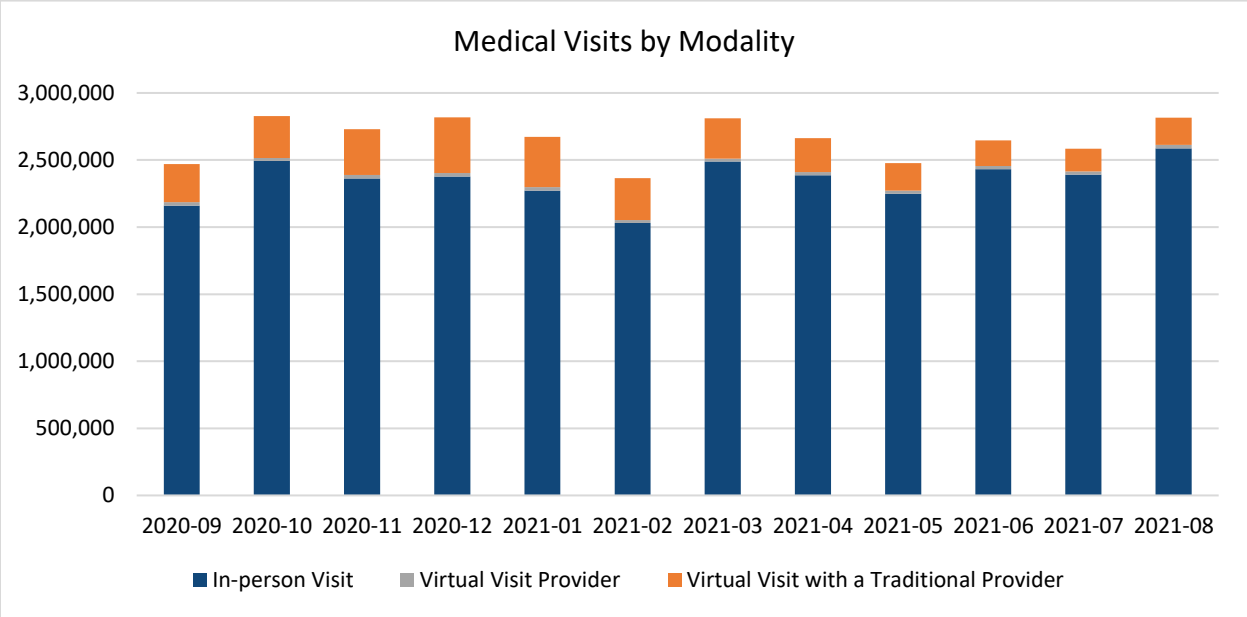
Figure 9. Differences in Virtual Care Utilization by Employee Sociodemographics, HPS 2021



RESULTS: CLAIMS DATA

Prior to the pandemic in January and February 2020, virtual medical visits were less than 1% of claims with national vendor providers providing 3.5x more virtual care than traditional providers. March 2020 saw a large increase in virtual visits with a large increase now seen in traditional providers offering virtual visits. The most virtual claims were seen in April 2020 (720,032). The overall number of virtual claims averaged 355,408 from March 2020 through August 2021, paid through September 2021. Claims from traditional providers began to decrease in Quarter 2 of 2021 and have remained steady through September 2021 (Figure 10).

Figure 10. UHC Claims incurred from January 2020 through August 2021, paid through September 2021

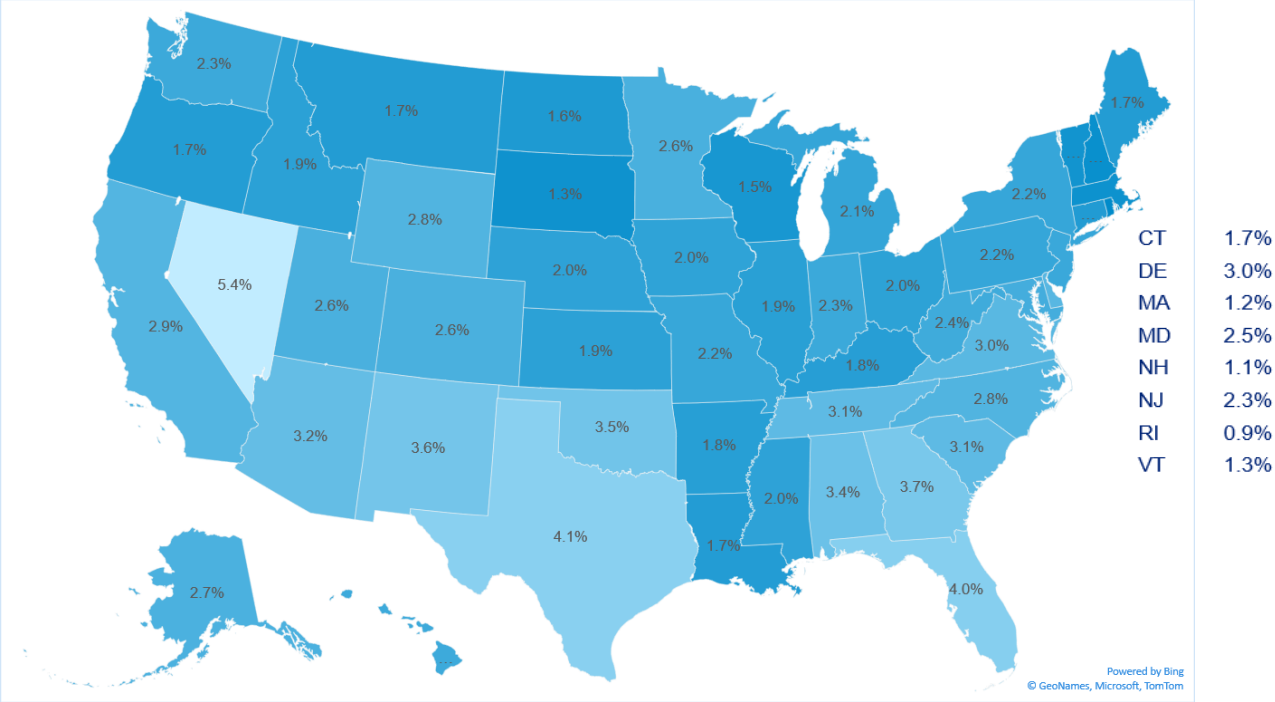


National Provider Virtual Visits

Among claims from September 2020 through payout in September 2021, 8% of virtual visits among all members were with national vendor virtual providers (which for UHC included contracts with Amwell, Doctors on Demand, Teladoc and non-contracted local companies). Members with national provider virtual visits had 45% higher ER visits and 52% higher urgent care visits than claimants who did not use national providers for virtual visits or those who did not have any virtual visits. However, the allowed costs for ER visits were lower for members using national vendor providers.

More females than males used national providers (60% vs. 40%). Members between 26-29 years old had the most national provider claims followed closesly by those 30-39 years old. Urban use was higher than rural use (2.8% vs. 2.2%). Figure 11 provides the percentage of members with a national provider virtual visit within the US. National provider use was higher among members with a household income less than $75K compared to those without virtual visits. National providers are used more by Hispanic members, followed by Carribbean Non-Hispanics and African Americans. East and South Asian members used national providers the least. African Americans who used virtual care visited the ER more than any other ethnic group.

Figure 11. Percentage of members (employees and dependents) with a national provider virtual visit by state

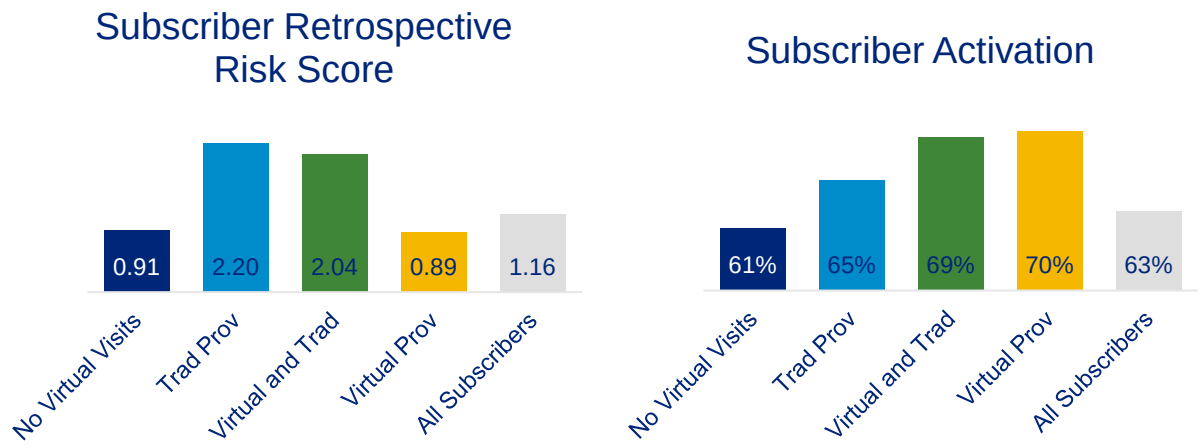


Respiratory system was the highest disease category among national provider users (29%) followed by genitourinary system (13%). However, at the diagnosis level, urinatry tract infection (UTI) was the top diagnosis, followed by acute upper respiratory infection and acute sinusitis unspecified. COVID-19 was ranked 24th in diagnoses prevalence.

Subscriber (Employee) Profile

Approximately one in four subscribers had a virtual visit through traditional and/or national providers from September 2020 through August 2021. Among all subscribers, 2.8% used national providers only for virtual care and 1.1% used both a national and traditional provider. The average age was highest for subscribers using traditional provider virtual visits (44.9 years), where national provider users were younger on average (38.5 years). Risk score, which indicates disease burden, was more than twice as high for those using traditional providers compared to national providers (Figure 12). This indicates that subscribers are using traditional providers for more chronic diseases compared to acute care. Activation scores were lowest for subscribers with no virtual visits and highest for subscribers using national providers for virtual care, which indicates that those using national providers are more knowledgable and confident in managing their healthcare.

Figure 12. Subscriber risk score and activation percentage by virtual visit type and all subscribers



GUIDANCE FOR EMPLOYERS

Having discussions with employer members allows us to provide guidance on what employers are doing to support organizations looking into changing their benefits strategy surrounding virtual care. We performed informal individual interviews surrounding employer virtual care strategies before and during the pandemic with the health and benefits professionals at several large organizations. The following themes emerged from these employer discussions:

National Providers

Many employers included a national virtual vendor provider option (e.g., Teladoc, Doctors on Demand, Amwell) for virtual care pre-pandemic, as it was considered the new 'shiny object' that could be a viable solution if employees had access and saw the value. There was appeal in the convenience of virtual care – employees could now be seen by a doctor at night or on the weekend in their own homes. However, utilization was low before the pandemic. One employer indicated that employees were not willing to trust virtual care or believe that it could work for them. Regardless of low use and lack of trust, all employers recognize the importance of virtual care availability. One employer used the following example: When an employee has a sick child, they need to call out of work, call the doctor, set up an appointment that will likely be later in the day, then drive to the appointment and then to pharmacy. That employee ends up missing an entire workday, yet virtual care does not have this impact on productivity.

When the pandemic began, all employers saw a large increase in use of national provider virtual care with one employer reporting participation as high as 40%. One employer moved to a new national provider strategy starting in 2021 rather than participating with their medical carriers' offerings, which had geographic differences. This ensures that employees can easily follow the same process in any service area, simplifying communications. Another employer stated that accountable care was not the strength of their carrier, which supported the decision to move towards a national provider.

Data is Key

Using data is always important to determine what programs are valuable to the employer and their employees. Every employer used data in some way to support their use of virtual care, especially since one employer pointed out that there was a concern with the quality of virtual care data a decade ago, along with no cost benefits at the time. Another employer pointed out that better outcomes have been seen when seeing a doctor in-person, yet organizations are seeing better results with behavioral health and recently physical health as well – costs for virtual care are improving.

Several employers discussed using utilization data to determine which employees were using virtual care including demographic and location information. Claims and cost data were also used to determine if virtual care is cost effective and if employees were seeking out more care after virtual care appointments. One employer stated that their vendor does deep dives when asked, as the employer did not have the time or desire to go through all the data collected. With so many changes in programs to meet pandemic needs, another employer is planning to incorporate a deep dive into outcomes data to show support of virtual care programs to leadership. Data are way more important now than ever before and will continue to shape the future of employee health strategy.

Creating Strategies for the Whole Individual

Employers recognized that healthcare is multi-faceted for the whole person. All pillars of health and wellbeing – physical, emotional, financial, and social – represent whole person health, and benefits should represent this while being curated for the individual. One way employers embrace this is to include virtual care platforms beyond physical health in their benefits plans. Mental health is the most common example, yet some employers had expanded to other fields including physical therapy. As employees complained about long wait times and poor member experience, one employer moved their EAP program to digital solutions in the last quarter of 2021. Here, employees can look at schedules for specific providers and schedule after business hours. The on-site health clinic has even gone virtual at some organizations.

All employers are planning to keep virtual care regardless of the status of the pandemic. One employer is looking to eliminate pre-certification for their virtual care providers to manage care efficiently. Many employers mentioned moving their virtual care to the medical home model to move from acute care and seeing doctors only once to primary care and managing long-term care with the same doctor(s). This effective primary care will guide people through their health journey, while also increasing healthcare access to those in rural areas.

Additionally, one employer was specifically concerned with the quality of providers in the virtual care space. They ran an audit on their national provider to find that many providers were not delivering treatment well, as training consisted of maybe an hour session on using technology. Given this information, the national provider started an immediate action plan to show the fixes they were putting in place to educate, monitor, and train providers. Assuring care quality will be necessary to determine when moving forward with primary care virtually. The same employer will conduct a similar audit on traditional providers, as well as the delivery of virtual behavioral health treatment.

Make Communications Pointed

Employers included virtual care in communications throughout the year (both pre-pandemic and currently) with varying success. One organization focused communication materials on the affordability and convenience of virtual care. To increase use prior to the pandemic, incentives were offered, such as a giveaway for a health-related item (e.g., thermometer, scale). One employer who offered an incentive saw nearly a 10x increase in the number of employees who registered for virtual care access. Additionally, another employer, who has offered virtual care for years, made a benefits video to rollout new solutions for 2022 and kept virtual care information in the video as a refresher for employees.

Some employers changed their virtual care communications after the pandemic took hold. Communications became more robust and helped with access when employees could not get ahold of their doctors – employers even had on-site clinics reach out to employees when they had symptoms to assist them in receiving the proper care.

Employers were clear to keep all information on virtual care providers in one place. After working with their Human Resources department, one professional discovered that many employees were unsure on who to contact to use their virtual care benefits. This employer then designed and provided every employee and their families with a refrigerator magnet with the direct phone numbers for the different services provided. One employer even had emails sent with messaging to forward to your home email and postcards sent with QR codes in case the employee themselves were not the healthcare decision makers to ensure everyone in the family knew how to find necessary healthcare treatments.

Lessons Learned for Other Employers

When asked about advice to offer to other organizations, these health and benefits professionals offered the follow lessons they learned while going through the virtual care process:

- Choose a provider and strategy that aligns with your population. There are many different options available - have the necessary discussions with vendors that seem like a good fit based on your employees needs and your company culture and values.
- National vendor virtual providers were not originally intended to replace primary care providers for people who do not have access to one, but now may fill that gap. It will take time to work towards a medical home model virtually.
- Communications must be focused, concise, and intentional.

Ask virtual care providers about how they are gathering data and measuring the quality of care provided.

DISCUSSION

When looking at the data from 2020 and 2021, the questions used to determine virtual care use in each data set were different in time frame, as was the sample of focus – 2020 data focused on employees already seeking healthcare; 2021 focused on all employees. The comparisons we draw here are made with this in mind and should be observed with caution. We saw no change month to month in virtual care use in 2020, which was expected due to continued pandemic restrictions limiting in-person care. However, we start to see overall use decrease in the summer of 2021, which is consistent with the National Center for Health Statistics' (NCHS) Research and Development Survey (RANDS). Adults participating in RANDS responded that their providers that they went to most for care decreased in May/June 2021 compared to June/July and August 2020. In addition, participants also decreased the number of virtual care appointments they scheduled in 2021 compared to those earlier pandemic dates in 2020.[7]

Other comparisons can be made by different measures in these data sets. Industry or job setting showed education to be highest in 2020 for virtual care use, yet healthcare was highest in 2021. In both years, food service/sales employees used virtual care the least – this indicates a need for health care access in certain occupations, especially in those in jobs deemed essential. Among those diagnosed with COVID-19, virtual care use was higher compared to those without a COVID-19 diagnosis. Employees who reported impairment or delayed medical care had higher virtual care use. Location patterns were similar in 2020 and 2021 – indicating higher use in the West and Northeast and the need for improved access and promotion in the South and Midwest. There were several similarities with demographics– males, 18-24 years, high school education or less, never married, and not insured all used virtual care less. As these groups persisted in lower use during both years, employer communication could specifically target these groups in their healthcare journeys ensuring they are able to access and receive the care they need.

Additionally, findings from the national data can be compared to the claims data. In 2020, national data indicated significantly lower virtual care use in rural areas, which was confirmed by lower use compared to urban areas in the UHC claims data, as well as in the RANDS data.[6] Rural access to healthcare always suffers compared to urban areas, and virtual care could improve healthcare use with proper virtual providers and access. Employers should observe differences in their own employee populations to determine where access is lacking and what they can do to support and communicate to groups with lower use. Employees in the 2021 national data that had at least one vaccination against COVID-19 were much higher users of virtual care than those who were not vaccinated. This could indicate higher activation scores, like UHC subscribers of national providers, who are comfortable in managing their health. The higher use of telehealth among frequent users of urgent care and the ER in the 2020 national data and among employees who received in-person care in the 2021 national data is also supported by the claims data, as subscribers of national providers had higher urgent care and ER use.

Not surprisingly, all the professionals who participated in employer guidance had integrated a national virtual provider into their benefits plans before the pandemic began. Although their utilization was low pre-pandemic, large employers we spoke with saw much higher national provider use among their employees compared to UHC members. More urgent situations, like an acute illness, are using national

[7] NCHS. Telemedicine. RANDS during COVID-19. Link.

virtual care as a first line of care, which would explain increase in ER and urgent care visits. The gap employers and healthcare advocates are concerned about – needing in-person care – is not yet closing, but employers are working towards improving virtual care solutions. While virtual behavioral care has successfully expanded broadly, the proposed medical home model employers discussed and moving all aspects of care from physical therapy to financial assistance virtually makes the future of virtual healthcare a promising one.

APPENDICES

Table 1. Weighted Characteristics of All Employees and Weighted Differences in Employees Who Had Virtual Appointment When Care Sought in the Past Year in the National Health Interview Survey, July through December 2020

	All Employees Who Sought Care in Past Year		Employees Who Had Virtual Appointment in the Past Year[1] (34.2%; 95% CI: 32.7-35.8)	
	%	95% CI	%	95% CI
Work Status				
Full-time	85.0	83.7-86.1	33.5	32.0-35.1
Part-time	15.0	13.9-16.3	39.1	34.8-43.7
Employer Offers Paid Sick Leave				
No	30.5	28.9-32.0	28.9	26.3-31.7
Yes	69.5	68.0-71.1	36.5	34.7-38.3
Employer Offers Health Insurance				
No	27.4	25.8-28.9	29.6	26.8-32.5
Yes	72.6	71.1-74.2	36.1	34.4-37.8
Delayed Medical Care				
No	75.1	73.8-76.5	29.4	27.8-31.0
Yes	24.9	23.5-26.2	49.0	46.0-51.9
Urgent Care Visits				
0 visits	68.5	67.0-70.0	31.9	30.2-33.7
1 visit	19.2	18.0-20.5	36.1	32.9-39.4
2 visits	7.5	6.7-8.5	39.8	34.6-45.2
3 or more visits	4.8	4.1-5.4	52.2	45.1-59.2
ER Visits				
0 visits	82.2	80.9-83.4	32.3	30.7-33.9
1 visit	12.5	11.5-3.6	43.5	39.1-48.1
2 or more visits	5.3	4.6-6.1	42.6	35.6-49.8
Days of Work Missed Due to Illness, Injury, or Disability				
0 days	55.5	54.0-57.1	28.8	27.0-30.7
1-2 days	15.3	14.2-16.4	32.8	29.2-36.6
3-10 days	19.6	18.4-20.9	42.6	39.4-46.0
11 or more days	9.6	8.7-10.5	50.9	45.8-55.9
Work Limited Due to Health Condition				
No	91.0	90.0-91.9	33.3	31.8-34.9
Yes	9.0	8.1-10.1	43.4	38.1-48.8
Self-Reported Impairment				
No	96.9	96.3-97.4	33.6	32.1-35.2
Yes	3.1	2.6-3.7	54.0	45.1-62.6
Health Conditions				
Hypertension	23.6	22.3-24.9	41.1	38.2-44.2
Diabetes	5.9	5.2-6.7	50.4	44.7-56.2
Prediabetes	10.5	9.5-11.4	46.1	41.9-50.3
Obesity (BMI)	34.2	32.7-35.7	38.6	36.2-41.1

	All Employees Who Sought Care in Past Year		Employees Who Had Virtual Appointment in the Past Year[1] (34.2%; 95% CI: 32.7-35.8)	
	%	95% CI	%	95% CI
Cancer, Any type	5.1	4.5-5.7	44.1	38.0-50.4
COVID-19	5.8	5.1-6.6	56.8	50.2-63.2
Anxiety and/or Depression	21.4	20.1-22.7	54.7	51.5-57.8
Region				
Northeast	17.6	16.0-19.2	39.1	35.5-42.8
Midwest	22.5	20.8-24.4	30.6	27.5-33.9
South	36.0	33.9-38.1	30.5	28.2-32.9
West	23.9	22.0-25.9	39.8	36.6-43.0
Community				
Urban	31.3	28.8-34.0	40.2	37.5-42.9
Suburban	25.8	23.2-28.5	34.7	31.8-37.6
Suburban/Rural	31.0	27.8-34.3	31.6	29.1-34.3
Rural	11.9	10.5-13.5	24.5	20.5-28.9
Demographics				
Sex				
Female	51.3	49.8-52.9	38.2	36.1-40.4
Male	48.7	47.1-50.2	30.0	28.1-32.0
Sexual Orientation				
Heterosexual	94.8	94.1-95.5	33.5	32.0-35.0
Not heterosexual	5.2	4.5-5.9	46.0	39.3-52.8
Age				
18–24 years	13.4	12.1-14.8	23.5	19.2-28.5
25–34 years	22.3	21.0-23.6	33.2	30.2-36.4
35–44 years	22.4	21.3-23.7	36.3	33.4-39.2
45–54 years	22.0	20.7-23.4	37.0	34.1-40.0
55–65 years	19.9	18.8-21.0	37.2	34.4-40.1
Race/Ethnicity				
White	63.0	60.9-65.0	36.0	34.2-37.9
Black	11.2	10.0-12.6	29.2	24.9-33.8
Asian	17.3	15.6-19.1	30.6	26.8-34.7
Hispanic	6.0	5.2-6.9	33.4	27.7-39.7
Other/Multi-racial	2.5	2.0-3.2	38.9	30.7-47.8
Education				
Less than high school	7.1	6.2-8.1	22.1	16.6-28.6
High school/GED	25.9	24.4-27.5	29.6	26.7-32.6
Some college	16.1	14.9-17.4	34.8	31.1-38.6
Associate's degree	13.9	12.9-15.0	33.8	29.9-37.9
Bachelor's degree	22.5	21.2-23.7	38.5	36.0-41.1
Graduate degree	14.5	13.5-15.5	41.1	37.9-44.5
Income				
$0-$35K	14.1	13.0-15.4	27.6	24.0-31.6
$35K-$50K	10.8	9.9-11.9	35.4	30.8-40.2
$50K-$75K	18.8	17.6-20.1	33.0	29.7-36.3
$75K-$100K	14.3	13.2-15.4	34.2	30.5-38.0

	All Employees Who Sought Care in Past Year		Employees Who Had Virtual Appointment in the Past Year[1] (34.2%; 95% CI: 32.7-35.8)	
	%	95% CI	%	95% CI
$100K or more	42.0	40.2-43.7	36.8	34.6-39.0
Marital Status				
Married	55.0	53.3-56.6	36.1	34.2-38.1
Divorced/Separated/Widowed	12.4	11.5-13.5	37.9	34.3-41.6
Never married	32.6	31.0-34.2	29.5	26.8-32.3
Number of Children				
0	57.8	56.1-59.4	34.8	32.9-36.8
1	18.2	17.0-19.5	35.1	31.6-38.7
2	16.2	15.1-17.4	33.6	30.1-37.3
3 or more	7.8	7.0-8.7	29.0	24.3-34.3
Health Insurance				
Any coverage	93.1	92.1-94.0	35.4	33.9-37.0
No coverage	6.9	6.0-7.9	18.6	14.1-24.2
General Health Status				
Excellent	27.0	25.6-28.4	26.3	23.7-29.1
Very good	38.7	37.3-40.2	33.2	31.1-35.5
Good	26.2	24.8-27.6	38.1	35.1-41.1
Fair/Poor	8.1	7.2-9.0	53.1	47.2-58.8

[1]Weighted percentages reflect the number of those who had a virtual appointment compared to those who did not have a virtual appointment in the past 12 months. Differences among variables were determined by the Pearson's Chi Square test and bolded if statistically significant with a p-value<0.05 between categories.

[2]Self-reported impairment is defined by selecting 'a lot of difficulty' or 'cannot do at all' to the level of difficulty to perform at least one of the following disability measures: seeing, hearing, walking/steps, communicating, remembering/concentrating, self care.

Table 2. Weighted Characteristics of All Employees and Weighted Differences in Employees Who Had Virtual Appointment in the Household Pulse Survey, April through October 2021

	All Employees		Had Virtual Appointment in the Past 4 Weeks (19.7%; 95% CI: 19.4-19.9)[1]	
	%	95% CI	%	95% CI
Telework in Household				
No	55.0	54.6-55.3	17.6	17.2-18.0
Yes	45.0	44.7-45.4	22.3	22.0-22.7
Sector of Employment				
Government	14.2	14.0-14.5	23.6	22.9-24.2
Private	62.4	62.1-62.8	18.4	18.0-18.7
Non-Profit	9.9	9.7-10.0	22.6	21.9-23.3
Self-employed/Family business	13.5	13.2-13.7	19.2	18.4-20.0
Had COVID-19				
No	83.8	83.6-84.1	19.3	19.0-19.6
Yes	16.2	15.9-16.4	21.8	21.0-22.5
Received COVID-19 Vaccine (at least one dose)				
No	19.7	19.4-20.0	15.2	14.6-15.8

	All Employees		Had Virtual Appointment in the Past 4 Weeks (19.7%; 95% CI: 19.4-19.9)[1]	
	%	95% CI	%	95% CI
Yes	80.3	80.0-80.6	20.8	20.5-21.1
Medicare Coverage				
No	96.3	96.2-96.5	19.3	19.0-19.6
Yes	3.7	3.5-3.8	29.7	27.9-31.6
Self-reported Impairment[2]				
None	47.6	47.3-48.0	15.4	15.1-15.8
Some	43.0	42.6-43.3	21.8	21.4-22.2
A lot	9.4	9.2-9.6	31.1	30.1-32.2
Difficulty with expenses				
None/A little	76.6	76.3-76.9	18.1	17.8-18.3
Some/Very	23.4	23.1-23.7	24.9	24.3-25.6
Health Insurance				
Any coverage	92.4	92.2-92.6	20.7	20.4-21.0
No coverage	7.6	7.4-7.8	8.3	7.5-9.2
Delayed Medical Care[3]				
No	82.3	82.0-82.7	18.6	18.2-19.0
Yes	17.7	17.3-18.0	37.0	35.9-38.1
Had In-person Medical or Dental Appointment in the Past Seven Days[4]				
No	46.7	46.2-47.2	13.0	12.5-13.5
Yes	53.3	52.8-53.8	21.8	21.2-22.3
Region				
Northeast	17.0	16.7-17.2	21.0	20.3-21.7
Midwest	21.4	21.2-21.7	16.3	15.8-16.7
South	37.2	36.9-37.6	19.3	18.9-19.7
West	24.4	24.1-24.7	22.3	21.8-22.9
Demographics				
Sex				
Female	48.7	48.4-49.1	22.7	22.4-23.1
Male	51.3	50.9-51.6	16.7	16.3-17.1
Age				
18–24 years	9.7	9.5-10.0	17.5	16.3-18.7
25–34 years	23.6	23.3-23.9	19.5	19.0-20.1
35–44 years	24.9	24.6-25.2	20.0	19.5-20.5
45–54 years	22.4	22.1-22.7	20.3	19.8-20.8
55–65 years	19.4	19.2-19.7	19.8	19.3-20.3
Race/Ethnicity				
White	63.9	63.6-64.3	18.5	18.2-18.8
Black	10.2	9.9-10.4	22.9	21.9-23.9
Asian	6.0	5.9-6.2	19.6	18.6-20.6
Hispanic	3.7	3.5-3.8	22.2	20.9-23.5
Other/Multi-racial	16.2	15.9-16.6	21.7	20.8-22.6
Education				
Less than high school	4.6	4.4-4.9	20.5	18.4-22.8

	All Employees		Had Virtual Appointment in the Past 4 Weeks (19.7%; 95% CI: 19.4-19.9)[1]	
	%	95% CI	%	95% CI
High school/GED	24.3	23.9-24.6	16.1	15.4-16.8
Some college	20.5	20.2-20.7	20.1	19.6-20.6
Associate's degree	10.3	10.1-10.4	20.0	19.3-20.7
Bachelor's degree	22.4	22.2-22.6	20.6	20.2-21.0
Graduate degree	17.9	17.7-18.1	22.5	22.1-23.0
Marital Status				
Married	57.6	57.3-58.0	19.7	19.3-20.0
Divorced/Separated/Widowed	13.1	12.8-13.3	22.0	21.3-22.6
Never married	29.3	29.0-29.7	18.7	18.1-19.2
Number of Children				
0	57.0	56.6-57.3	19.3	18.9-19.6
1	19.6	19.3-19.9	20.8	20.1-21.4
2	15.1	14.9-15.4	19.1	18.5-19.8
3 or more	8.3	8.1-8.5	20.9	19.8-22.0

[1]Weighted percentages reflect the number of those who had a virtual appointment compared to those who did not have a virtual appointment in the past 12 months. Differences among variables were determined by the Pearson's Chi Square test and bolded if statistically significant with a p-value<0.05 between categories.

[2]Impairment is defined as difficulty with seeing, hearing, remembering, and/or mobility.

[3]Delayed medical care in the past four weeks due to the coronavirus pandemic was asked in Phase 3.1 only.

[4]Had in-person medical or dental appointments in household in last seven days was asked in Phase 3.2 only.